Job: E2

Federal Aid in Wildlife Restoration Project №: W-15-R

Title of Job: Spring 2017 Turkey Hunter Survey



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The spring turkey hunter survey is conducted each year at the end of the spring season. In 2017, the spring season closed on 31 May. The objective of the survey is to obtain information on the spring turkey harvest and success, to determine age and sex of the harvest, and to assess characteristics of the hunt and hunters (e.g., satisfaction). This year's survey was available to hunters from 23 June to 10 July 2017, inclusive. A summary of estimated harvest and success is available in a separate report, 2017 Spring Wild Turkey Harvest.

Caveats. The spring Wild Turkey Hunter Survey samples spring turkey hunters who provided valid email addresses at the time they purchased their permit(s). As such, the sample frame may be biased and not strictly generalizable to the population of all spring turkey hunters. For the spring 2017 season, however, 66.4% of all permits sold were associated with an email address. After accounting for individuals who purchased multiple permits, 65.8% of unique, individual permit buyers provided an email address. A reminder email was sent to all non-respondents one week after the initial invitation was sent, but no further attempts were made to contact hunters who failed to respond to the survey. Therefore, results might be biased toward successful hunters, if successful hunters respond more readily to harvest surveys. However, it is likely that such biases are small given the proportion of permit buyers sampled and the response rate (see 2017 Spring Wild Turkey Harvest report).

Interpretations. Non-resident hunters during the spring 2017 season came largely from Colorado and Minnesota, and residents from Lancaster, Douglas, and Sarpy Counties. Most resident hunters did not hunt in other states (94%), but the majority of non-residents (72%) had hunted in other states, including Kansas and Minnesota. Spring 2017 turkey hunters spent an average of 5.8 days afield hunting turkeys. Total number of days spent afield by respondents was 17,664. Knox, Dawes, Lincoln, and Custer Counties were reported as being hunted in most frequently. Whereas residents were not pursuing a specific subspecies (74%), non-residents reported pursuing Merriam's more than other subspecies (49%). Importance of feather coloration and genetic purity of a particular subspecies was generally low for residents and non-residents, but was higher among non-residents pursuing Merriam's turkeys. Almost all resident (98%) and non-resident (96%) hunters would hunt Nebraska again based on their experiences in the spring of 2017. Most hunters were satisfied with the number of turkeys seen afield and were overall satisfied with their spring 2017 hunting experiences. Among resident hunters, availability of permits, turkey abundance, and having family in the state were most important in their decision to hunt in Nebraska. Among non-residents, subspecies available, the number of permits allowed per hunter, and success rates were also important.

Take-home Message. Spring turkey hunting continues to be a popular and satisfying experience for turkey hunters.

Methods. This year's survey was composed and administered in-house using Snap Survey development software (Snap v11) and Snap Webhosting service. An initial invitation to participate in the survey for the spring 2017 season was sent to 17,086 (65.8% of unique permit buyers) spring turkey hunters, but 654 were bounced back as undeliverable, giving an effective sample size of 16,432 permitted hunters. Initial invitations were emailed on 23 June 2017, and a reminder email was sent to all non-responding hunters on 30 June 2017. The survey was closed on 10 July 2017. The survey was also available on the NGPC website for hunters who did not have valid emails associated with their permits. The website survey was open over the same period as the invitation-only version. At the end of the survey period, responses had been received from 3,100 spring turkey hunters, representing 4,588 individual permits for the spring 2017 season. The raw response rate was, therefore, 18.9% and the permit response rate was 27.9%. Each survey respondent represented 7.2 spring 2017 permit buyers.

Results. Below are figures and tables that summarize hunter responses to survey questions. In most cases, the results are presented for residents, non-residents, and all hunters combined.

 Table 1. Statistics on how long survey respondents spent (in minutes) taking the survey.

Counts		Descriptive Statistics						
Respondents	Total	Minimum	Maximum	Median	Mean	Standard Deviation		
Duration of interview	3100	0.4	1323.2	7.8	9.8	25.2		

Table 2. Top ten states in which spring 2017 non-resident turkey hunters resided and raw number of respondents from each.

State of residence	
Colorado	372
Minnesota	170
Missouri	98
Arkansas	85
lowa	84
Mississippi	70
Indiana	63
Illinois	60
Wisconsin	57
Georgia	38

Table 3. Among Nebraska residents, top 10 counties of residence and raw number of respondents from each for the spring 2017 turkey season.

r		
County		
	Lancaster	231
	Douglas	189
	Sarpy	114
	Buffalo	68
	Hall	45
	Adams	40
	Seward	38
	Madison	35
	Lincoln	29
	Cass	27

Table 4. Number of permits purchased by resident, non-resident, and all hunters for the 2017 spring turkey season.

	Resident				Non-resident			Total				
Number of Permits	0	1	2	3	0	1	2	3	0	1	2	3
\$5.00 Statewide Youth Permit	1431	1201	255	135	1596	898	478	206	3027	2099	733	341
	47%	40%	8%	4%	50%	28%	15%	6%	49%	34%	12%	6%
Statewide Regular or	1278	170	42	21	1450	72	40	27	2728	242	82	48
Landowner Permit	85%	11%	3%	1%	91%	5%	3%	2%	88%	8%	3%	2%

Table 5. Resident, non-resident, and total number of hunters reporting hunting wild turkey in states other than Nebraska during the spring 2017 season.

Did you hunt turkeys during the spring 2017 season in any state other than Nebraska?	Resident	Non-resident	Total
Yes	86	1142	1228
	6%	72%	40%
No	1423	445	1868
	94%	28%	60%

Table 6. State most frequently hunted by resident, non-resident, and all hunters who indicated that they hunted in states other than Nebraska during the spring 2017 turkey season.

Resident		Non-reside	nt	Total		
Kansas	17	Kansas	157	Kansas	174	
Missouri	7	Minnesota	103	Minnesota	105	
lowa	5	Missouri	94	Missouri	101	
Florida	3	Colorado	83	Colorado	83	
South Dakota	3	lowa	60	lowa	65	
Minnesota	2	Mississippi	54	Mississippi	54	
New Mexico	2	Wisconsin	51	Wisconsin	51	
Oklahoma	2	Indiana	45	Illinois	45	
Illinois	1	Illinois	44	Indiana	45	
Maryland	1	Arkansas	40	Arkansas	40	

Table 7. Number of resident, non-resident, and total respondents who indicated whether they hunted turkeys in Nebraska during the spring 2017 spring turkey season.

Did you hunt turkeys in Nebraska during the spring 2017 season?	Resident	Non-resident	Total
Yes	1452	1572	3024
	96%	99%	98%
No	59	17	76
	4%	1%	2%

Table 8. Total and average number of days afield during the 2017 spring turkey season reported by resident, non-resident, and total hunter respondents who hunted.

How many days did you hunt turkeys during the 2017 spring season?	Resident	Non-resident	Total	
Total	8,357	9,307	17,664	
Days per hunter	5.8	5.9	5.8	

Table 9. Top 10 counties resident, non-resident, and all hunters reported hunting in most frequently during the 2017 spring turkey hunting season.

Resi	Resident		esident	Total		
Lancaster	87	Dawes	133	Knox	160	
Knox	74	Lincoln	95	Dawes	157	
Lincoln	49	Knox	86	Lincoln	144	
Custer	44	Custer	70	Custer	114	
Cass	42	Unknown	62	Holt	92	
Holt	41	Red Willow	59	Lancaster	92	
Johnson	39	Cherry	53	Red Willow	80	
Buffalo	38	Frontier	51	Cherry	72	
Saunders	38	Holt	51	Frontier	71	
Otoe	37	Sheridan	50	Boyd	69	

Table 10. Turkey sub-species resident, non-resident and total hunters reported pursuing during the 2017 spring turkey season.

Subspecies	Resident	Non-resident	Total
Respondents	1439	1568	3007
Eastern	151	118	269
	10%	8%	9%
Merriam's	261	761	1022
	18%	49%	34%
Rio Grande	31	207	238
	2%	13%	8%
No particular subspecies	1067	685	1752
	74%	44%	58%

Table 11. Top 10 counties of harvest for the <u>first</u> turkey harvested for resident, non-resident, and total hunters during the 2017 spring turkey season.

Resident		Non-re	esident esident	Total		
Lancaster	40	Lincoln	70	Knox	105	
Knox	39	Dawes	69	Lincoln	104	
Lincoln	34	Knox	66	Custer	89	
Custer	32	Custer	57	Dawes	85	
Cass	23	Unknown	46	Holt	68	
Holt	23	Cherry	45	Cherry	58	
Buffalo	22	Holt	45	Red Willow	57	
Sarpy	20	Red Willow	44	Frontier	49	
Saunders	20	Sheridan	42	Unknown	48	
Otoe	19	Frontier	34	Sheridan	46	

Table 12. Top 10 counties of harvest for the <u>second</u> turkey harvested for resident, non-resident, and total hunters during the 2017 spring turkey season.

Resident		Non-res	sident	Total		
Custer	13	Lincoln	28	Lincoln	40	
Lincoln	12	Custer	26	Custer	39	
Holt	7	Unknown	26	Knox	32	
Knox	7	Knox	25	Dawes	27	
Buffalo	6	Dawes	22	Unknown	27	
Dawson	6	Sheridan	20	Holt	24	
Lancaster	6	Keya Paha	18	Frontier	21	
Saunders	6	Holt	17	Sheridan	20	
Dawes	5	Frontier	16	Keya Paha	19	
Frontier	5	Cherry	15	Boyd	17	

Table 13. Top 10 counties of harvest for the <u>third</u> turkey harvested for resident, non-resident, and total hunters during the 2017 spring turkey season.

Resi	dent	Non-re	esident	Total		
Custer	6	Lincoln	11	Custer	14	
Frontier	4	Knox	9	Knox	12	
Johnson	3	Custer	8	Lincoln	12	
Knox	3	Dawes	8	Frontier	10	
Lancaster	3	Unknown	7	Dawes	8	
Cedar	2	Boyd	6	Unknown	8	
Franklin	2	Frontier	6	Boyd	7	
Hall	2	Harlan	6	Harlan	7	
Saline	2	Hayes	5	Hall	5	
Boone	1	Dawson	4	Hayes	5	

Table 14. Hunting activity and timing of harvest by week of season for resident, non-resident, and total hunters during the 2017 spring turkey season.

	Resi	dent	Non-re	esident	То	tal
Week of season	Hunted	Harvested	Hunted	Harvested	Hunted	Harvested
Early & Youth Archery (25	250	88	176	74	426	162
March-7 April)	7%	10%	9%	7%	8%	8%
Youth Shotgun/Archery (8	283	76	127	58	410	134
April-31 May)	8%	8%	7%	5%	8%	7%
Week 1, any weapon (15-	694	194	414	256	1108	450
21 April)	20%	21%	22%	23%	20%	22%
Week 2, any weapon (22-	640	161	330	193	970	354
28 April)	18%	18%	17%	18%	18%	18%
Week 3, any weapon (29	539	130	301	172	840	302
April-5 May)	15%	14%	16%	16%	15%	15%
Week 4, any weapon (6-	425	107	240	151	665	258
12 May)	12%	12%	13%	14%	13%	13%
Week 5, any weapon (13-	356	64	175	102	531	166
19 May)	10%	7%	9%	9%	10%	8%
Late Season, any weapon	331	88	137	91	468	179
(20-31 May)	9%	10%	7%	8%	9%	9%

Table 15. Subspecies of wild turkey resident, non-resident, and total hunters purported as the last turkey they harvested during the 2017 spring turkey season.

	Resident	Non-resident	Total
Respondents	814	1157	1971
Eastern Wild Turkey	229	110	339
	28%	10%	17%
Rio Grande Wild Turkey	142	246	388
	17%	21%	20%
Merriam's Wild Turkey	170	468	638
	21%	40%	32%
A mixture of one or more of these	188	306	494
(hybrid)	23%	26%	25%
Do not remember	85	27	112
	10%	2%	6%

Table 16. Number of turkeys harvested by age and sex by resident, non-resident, and total hunters during the 2017 spring turkey season. Percentages may not sum to 100% due to rounding errors.

		Resid	dent			Non-re	esident		Total			
Number harvested	0	1	2	3	0	1	2	3	0	1	2	3
Respondents	1508	713	131	48	1951	815	298	119	3459	1528	429	167
Adult males (tems)	91	541	105	45	70	655	274	118	161	1196	379	163
Adult males (toms)	12%	69%	13%	6%	6%	59%	25%	11%	8%	63%	20%	9%
Juvenile males (jakes)	401	160	25	3	568	149	23	1	969	309	48	4
Juverille maies (jakes)	68%	27%	4%	1%	77%	20%	3%	0%	73%	23%	4%	0%
Doordod hone	508	11	-	-	659	10	-	-	1167	21	-	-
Bearded hens	98%	2%	-	-	99%	1%	-	-	98%	2%	-	-
Links own aga/say	508	1	1	-	654	1	1	-	1162	2	2	-
Unknown age/sex	100%	0%	0%	-	100%	0%	0%	-	100%	0%	0%	-

Table 17. Allocation of harvest by residents, non-residents, and total hunters between private land where permission was required to hunt and public lands during the 2017 spring season. Percentages may not sum to 100% due to rounding errors.

		Resident				Non-resident				Total			
Turkeys harvested	0	1	2	3	0	1	2	3	0	1	2	3	
Respondents	630	620	143	67	763	733	313	135	1393	1353	456	202	
Private land where	64	553	128	62	135	574	284	115	199	1127	412	177	
permission was required?	10%	89%	90%	93%	18%	78%	91%	85%	14%	83%	90%	88%	
Land open to	566	67	15	5	628	159	29	20	1194	226	44	25	
public hunting?	90%	11%	10%	7%	82%	22%	9%	15%	86%	17%	10%	12%	

Figure 1. Resident, non-resident, and total hunters' rating of the number of turkeys observed during the spring 2017 turkey season.

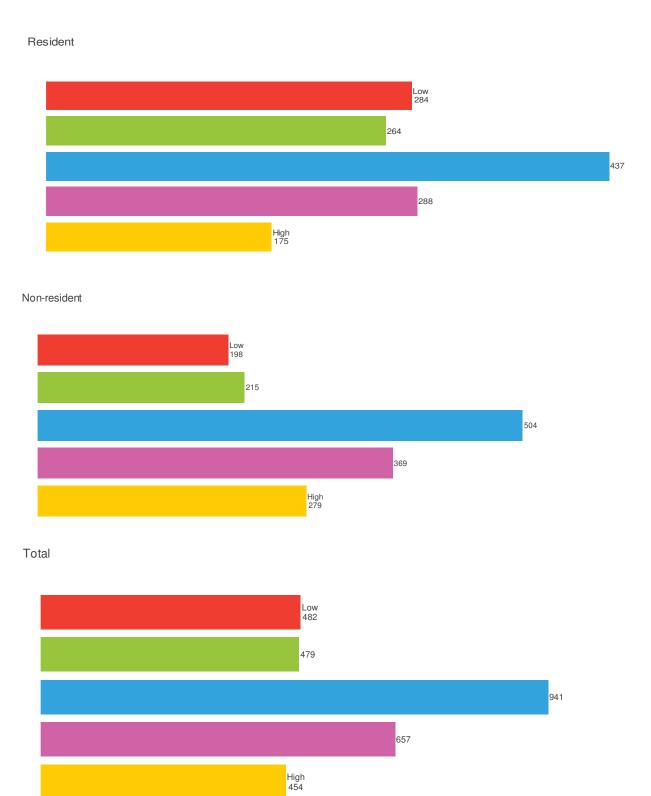
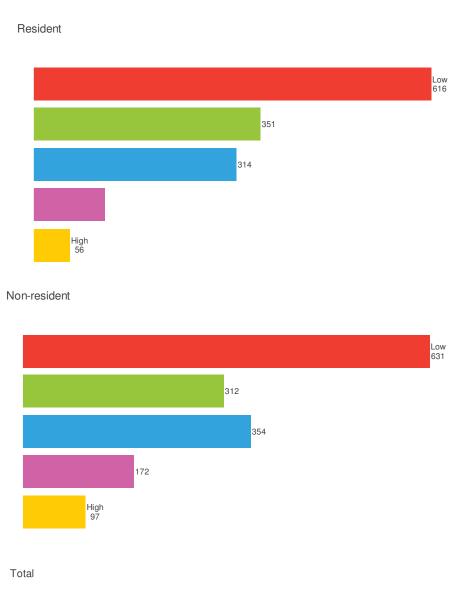


Figure 2. Resident, non-resident, and total hunter rating of the number of turkey hunters encountered during the spring 2017 turkey season.



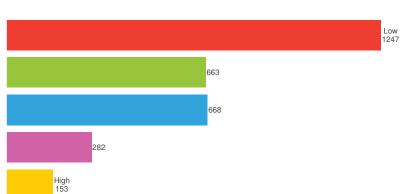


Table 18. Importance to resident, non-resident, and all hunters that the turkey they harvested has the correct feather coloration for the subspecies they were pursuing.

Respondents	Resident	Non-resident	Total
Base	1449	1569	3018
Very Important	61	359	420
	4%	23%	14%
	94	245	339
	6%	16%	11%
Neutral	238	296	534
	16%	19%	18%
	176	148	324
	12%	9%	11%
Not Important at all	880	521	1401
	61%	33%	46%

Table 19. Importance of correct sub-species coloration of turkey to the sub-species being pursued for resident, non-resident, and all hunters by the species hunters reported pursuing.

							Importan	ce Ranking				
		Species	Very Im	Very Important		ortant	Ne	Neutral		oortant	Not Important at all	
		Eastern	12	8%	19	13%	35	23%	24	16%	61	40%
	nt	는 Merriam's	29	11%	38	15%	59	23%	43	17%	91	35%
	Resident	Rio Grande	8	26%	6	19%	6	19%	2	6%	9	29%
р	ど No particular subspecies	18	2%	47	4%	156	15%	110	10%	735	69%	
rrsue		Eastern	23	20%	21	18%	24	21%	11	9%	38	32%
ng Pu	dent	Merriam's	305	40%	180	24%	142	19%	50	7%	82	11%
s Bei	Non-resident	Rio Grande	52	25%	53	26%	55	27%	13	6%	34	16%
Sub-species Being Pursued	Nor	No particular subspecies	30	4%	42	6%	130	19%	88	13%	394	58%
S		Eastern	35	13%	40	15%	59	22%	35	13%	99	37%
		Merriam's	334	33%	218	21%	201	20%	93	9%	173	17%
	Total	Rio Grande	60	25%	59	25%	61	26%	15	6%	43	18%
		No particular subspecies	48	3%	89	5%	286	16%	198	11%	1129	65%

Table 20. Importance of exact genetic match (genetic purity) between the turkey harvested and the subspecies resident, non-resident, and all hunters reported pursuing.

Respondents	Resident	Non-resident	Total
Base	1449	1570	3019
Vom dinamentant	72	288	360
Very Important	5%	18%	12%
	84	265	349
	6%	17%	12%
Neutral	238	303	541
Neutral	16%	19%	18%
	174	164	338
	12%	10%	11%
Not be a stock of all	881	550	1431
Not Important at all	61%	35%	47%

Table 21. The importance of the genetic purity of the harvested turkey matching the sub-species being pursued by resident, non-resident, and all hunters by sub-species hunters reported pursuing.

							Importar	nce Ranking	3			
		_	Very Im	portant	Impo	ortant	Neu	utral	Unimp	ortant	Not Important at all	
	ıt	Eastern	12	8%	20	13%	40	27%	18	12%	60	40%
		Merriam's	34	13%	28	11%	68	26%	47	18%	83	32%
	Resident	Rio Grande	7	23%	2	6%	8	26%	4	13%	10	32%
р	Res	No particular subspecies	24	2%	43	4%	142	13%	111	10%	747	70%
Irsue		Eastern	16	14%	21	18%	25	21%	12	10%	43	37%
ng Pu	ent	Merriam's	241	32%	187	25%	162	21%	72	9%	98	13%
Beir	resid	Rio Grande	36	17%	61	30%	53	26%	14	7%	42	20%
Sub-species Being Pursued	Non-resident	No particular subspecies	26	4%	50	7%	118	17%	84	12%	407	59%
SL		Eastern	28	10%	41	15%	65	24%	30	11%	103	39%
		Merriam's	275	27%	215	21%	230	23%	119	12%	181	18%
	Total	Rio Grande	43	18%	63	27%	61	26%	18	8%	52	22%
	—	No particular subspecies	50	3%	93	5%	260	15%	195	11%	1154	66%

Table 22. Resident, non-resident, and total number of hunters who would hunt turkeys in Nebraska again in the future given their experiences during the 2017 spring season.

	Resident	Non-resident	Total
Respondents	1449	1569	3018
Yes	1420	1502	2922
	98%	96%	97%
No	29	67	96
	2%	4%	3%

Figure 3. Hunter agreement with the statement, "I saw too many hunters," regarding their experiences during the spring 2017 turkey season.

[&]quot;I saw too many hunters."

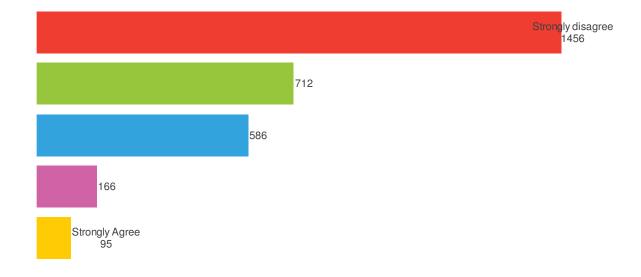


Figure 4. Hunter agreement with the statement, "I was satisfied with the number of turkeys I saw," regarding their experiences during the spring 201 turkey season.

"I was satisfied with the number of turkeys I saw."

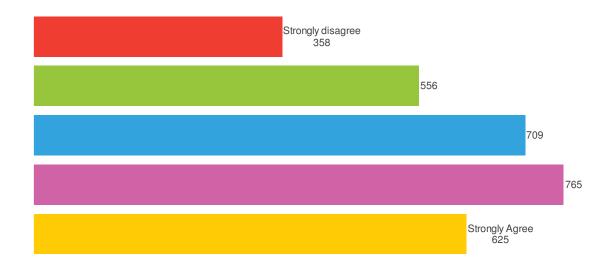


Figure 5. Hunter agreement with the statement, "I was satisfied with the amount of land open to public hunting," regarding their experiences during the 2017 spring turkey season.

"I was satisfied with the amount of land open to public hunting."

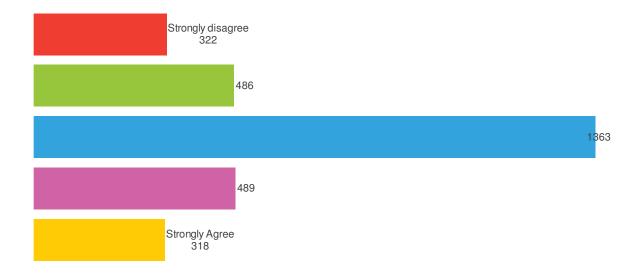


Figure 6. Hunter agreement with the statement, "Overall, I was satisfied with the quality of my hunting experience," regarding their experiences during the 2017 spring turkey season.

"Overall, I was satisfied with the quality of my hunting experience."

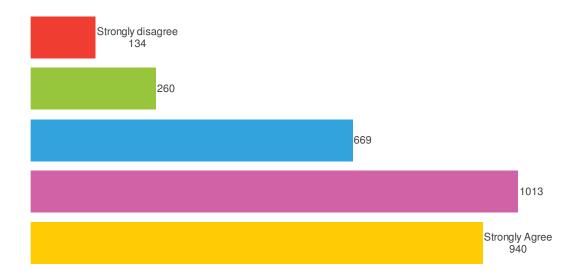
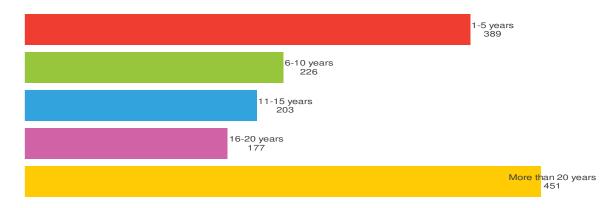


Table 23. Number of hunters accompanying youth, novice, women, and apprentice hunters afield, and the number they reported accompanying during the spring 2017 turkey season.

	Hunters Accompanying	Number Accompanied
Respondents	1110	
Youth hunters less than 16 years old	516	F12
	46%	512
New adult hunters at least 16 years old	417	407
	38%	407
Women	333	302
	30%	302
Apprentice license holders	92	78
	8%	/8

Figure 7. Resident, non-resident, and total number of years of experience hunting turkeys reported by hunters who hunted during the 2017 spring turkey season.

Resident



Non-resdident



Total

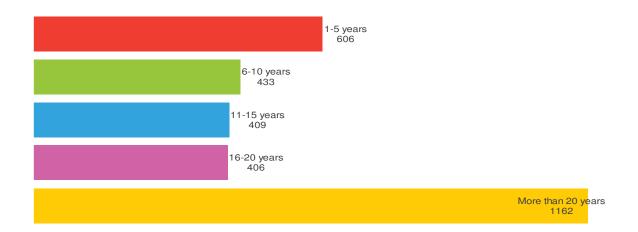


Table 24. Factors influencing resident, non-resident, and total hunters' decisions to hunt turkeys in Nebraska during the 2017 spring season. (Choices with ≥40% selection are in bold.)

	Resident	Non-resident	Total
Respondents	1432	1569	3001
Availability of public land to hunt	286	429	715
	20%	27%	24%
Family and/or friends who live in state	657	609	1266
	46%	39%	42%
Ability to hunt a different or particular	161	763	924
subspecies of turkey	11%	49%	31%
Availability of permits	800	971	1771
	56%	62%	59%
Permit costs	446	385	831
	31%	25%	28%
Number of permits allowed per hunter	354	643	997
	25%	41%	33%
Hunter success rate	465	620	1085
	32%	40%	36%
Turkey population abundance	731	954	1685
	51%	61%	56%
Other	247	145	392
	17%	9%	13%

Figure 8. Word cloud of hunters' "Other" responses regarding the factors influencing their decision to hunt wild turkeys in Nebraska during the spring 2017 season.

If other, please provide further details.

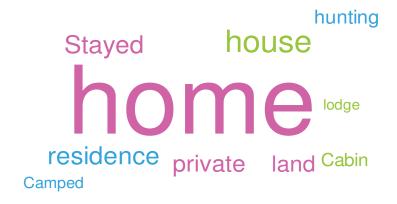


Table 21. Type of lodging resident, non-resident, and total hunters used when hunting turkeys in Nebraska during the 2017 spring season.

	Resident	Non-resident	Total
Respondents	1427	1566	2993
Hotel/motel	59	502	561
	4%	32%	19%
Commercial campground (e.g., KOA)	1	19	20
	0%	1%	1%
Public camping site (e.g., state parks)	62	179	241
	4%	11%	8%
Private residence of family or friends	919	596	1515
	64%	38%	51%
Other	386	270	656
	27%	17%	22%

Figure 9. Word cloud of hunters' "Other" responses regarding the type of lodging resident and non-resident hunters used while hunting wild turkeys in Nebraska during the spring 2017 season.

Other locations where resident hunters stayed while hunting



Other locations where non-resident hunters stayed while hunting

